CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/CEMENT/2014-15

Date: 19.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Mr. Lakshminarayana,** Contractor, Bangalore.
NAME OF THE WORK	:	Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	:	AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	a) Initial Setting Time	IS-4031 (Part -5)	145 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	490 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	26.50 %	-

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/SAND/2014-15 : 19.07.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Mr. Lakshminarayana,** Contractor, Bangalore.

Name of Work : Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.

Reference : AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014

Date of Testing : 19.07.2014

Material : Sand Total Wt. of Aggregates in gms **2000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	99	4.95	4.95	95.1	90-100
2.36	199	9.95	14.90	85.1	75-100
1.18	402	20.10	35.00	65.0	55-90
600 Micron	485	24.25	59.25	40.8	35-59
300 Micron	498	24.90	84.15	15.9	8-30
150 Micron	199	9.95	94.10	5.9	0-10

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು.
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ.
ಯಲಹಂಕ ವಲಯ.
ಬ್ರ. ಬೆಂ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/AGG/2014-15 : 19.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Mr. Lakshminarayana,** Contractor, Bangalore.

Name of Work : Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.

Reference : AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014

Date of Testing : 19.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **26000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	1030	3.96	3.96	96.04	95-100
20	16855	64.83	68.79	31.21	30-70
10	5028	19.34	88.13	11.87	10-35
4.75	2596	9.98	98.11	1.89	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

W.11

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು,
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/STEEL/2014-15 22.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer**, Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	:	**Mr. Lakshminarayana**, Contractor, Bangalore.
Name of the work	:	Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.
Reference	:	AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014
Date of Test	:	22.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	8	0.40	510	546	12.80	O.K	O.K

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported Within 30 days from the date of testing..

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/STEEL/2014-15 22.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer**, Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	:	**Mr. Lakshminarayana**, Contractor, Bangalore.
Name of the work	:	Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.
Reference	:	AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014
Date of Test	:	22.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	10	0.62	513	548	13.10	O.K	O.K

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported Within 30 days from the date of testing..

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/CUBE/2014-15 22.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Mr. Lakshminarayana,** Contractor, Bangalore.
Name of the work	: Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.
Reference	: AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014
Sample ID	: RCC Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.07.2014	22.08.2014	8.168	478.2	21.25
2	25.07.2014	22.08.2014	8.237	496.5	22.07
3	25.07.2014	22.08.2014	8.395	519.7	23.10

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.11/L/CUBE/2014-15 15.09.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Mr. Lakshminarayana,** Contractor, Bangalore.
Name of the work	: Improvements to CC Road and CC Drains at Chikkabettahalli Village (Newly added Area) at MS Palya Behind Somanna's Appartments in Ward No.11 (Kuvempunagara), Vidyaranyapura Sub Division, BBMP, Bangalore.
Reference	: AEE/BBMP/ VSD/PR/173/1/2014-15 Dated: 17.07.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	18.08.2014	15.09.2014	8.463	524.3	23.30
2	18.08.2014	15.09.2014	8.372	499.8	22.21
3	18.08.2014	15.09.2014	8.249	482.4	21.44

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory
3. Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು.
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com